

REMARKS

The Office Action rejects claims 31, 35, 36, and 38 and objects to claims 3, 14, 16, 32-34 and 37. Claims 1, 2, 4-13, 15 and 17-30 are allowed.

The specification and drawings are amended. Claims 3, 14, 16, 31, 33, 34, and 37 are amended, claim 32 is cancelled without prejudice or disclaimer and new claims 39-47 are added. The objections and rejections are obviated below, and allowance of all claims is respectfully requested.

Objection to the Specification

The Office Action objected to the specification because the trademark "TEFLON[®]" is unaccompanied by the generic terminology. Applicants amend the specification so that the trademark TEFLON[®] is accompanied by the generic terminology "fluoropolymer resin." It is respectfully submitted that providing the generic terminology for TEFLON[®] does not constitute new matter. Accordingly, withdrawal of the objection to the specification is respectfully requested.

Objection to the Drawings

The Office Action objects to Figures 1-3 because these figures do not include hatching to reflect the materials of the coating layer, inner and outer insulators, the resistance heating body, end cap, and gear cap as disclosed by the specification and claimed. Applicants submit two replacement sheets of drawings including amended Figures 1-3 to include the additional proper hatching. Accordingly, withdrawal of the objection to the drawings is respectfully requested.

Objections to Claims 3, 14 and 16

The Office Action objects to claims 3 and 14 for typographical errors. Applicants amend claims 3 and 14 to correct the typographical errors. Therefore the amendments to claims 3 and 14 to not change the original scope of these claims.

In addition, the Office Action objects to claim 16 because claim 16 includes the trademark TEFLON[®]. Applicants amend claim 16 to substitute the generic terminology "fluoropolymer resin" for the registered trademark "TEFLON." Therefore, the amendment to claim 16 does not change the scope of the claim.

Accordingly, withdrawal of the objections to claims 3, 14 and 18 is respectfully requested.

AMENDMENTS TO THE DRAWINGS:

The attached drawing(s) include changes to FIGS. 1-3. The two sheets containing FIGS. 1-3 replace the original two sheets including FIGS. 1-3.

Page 2 of the Office Action objects to the drawings. In order to overcome these objections, replacement figures are submitted herewith. In FIGS. 1-3, hatching to reflect the materials of the coating layer, inner and outer insulators, the resistance heating body, end cap, and gear cap as disclosed in the specification is added. Approval of these changes to the Drawings is respectfully requested.

Rejection of Claims 31 and 38 under 35 U.S.C. §102(b)

Claims 31 and 38 are rejected under 35 U.S.C. §102(b) as being anticipated by JP2000-321911 to Kawamura et al. (hereinafter referred to as "Kawamura"). Claim 38 depends directly from claim 31.

Applicants amend claim 31 to include the allowable features of claim 32 as indicated on page 6 of the Office Action. Therefore, for at least these reasons, it is respectfully submitted that claims 1 and 38 patentably distinguish over Kawamura.

Rejection of Claims 35 and 36 under 35 U.S.C. §103(a)

Claim 35 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kawamura in view of JP 58-016273 to Shigenobu. Claim 35 depends directly from claim 31.

As discussed above, Applicants amend claim 31 to include the allowable features of claim 32 as indicated on page 6 of the Office Action. Therefore, for at least these reasons, it is respectfully submitted that claim 35 patentably distinguishes over Kawamura.

Claim 36 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kawamura in view of JP 2000-356922 to Miyaka. Claim 36 depends directly from claim 31.

As discussed above, Applicants amend claim 31 to include the allowable features of claim 32 as indicated on page 6 of the Office Action. Therefore, for at least these reasons, it is respectfully submitted that claim 36 patentably distinguishes over Kawamura.

Objections to Claims 32, 33, 34 and 37

The Office Action objects to claims 32, 33, 34 and 37 as being dependent on rejected base claim 31. As discussed above, Applicants amend claim 31 to incorporate the allowable features of claim 31 as indicated on page 6 of the Office Action, and Applicants cancel claim 32 without prejudice or disclaimer.

In addition, Applicants amend claims 33, 34, and 37 to place these claims in independent form.

Accordingly, it is respectfully submitted that the cancellation of claim 32 without prejudice or disclaimer and the placement of claims 33, 34 and 37 in independent form obviate the objections to these claims.

Further, new claims 39-41 are added to depend from claim 33, new claims 42-44 are added to depend from claim 34 and new claims 45-47 are added to depend from claim 37. New claims 39, 42 and 45 recite features similar to the features in original claim 35. New claims 40,

43 and 46 recite features similar to the features in original claim 36. New claims 41, 44 and 47 recite features similar to the features in original claim 38. Accordingly, entry of the new claims is respectfully requested.

Summary

Claims 1-31 and 33-47 are pending and under consideration. It is respectfully submitted that the replacement Figs. 1-3 satisfy MPEP §608.02 as well as 37 C.F.R. §§ 1.84(c) and 1.121(d), and that the amendments to the specification and claims obviate the objections raised in the Office Action. In addition, it is respectfully submitted that the pending claims contain at least some of the allowable features indicated on page 6 of the Office Action.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

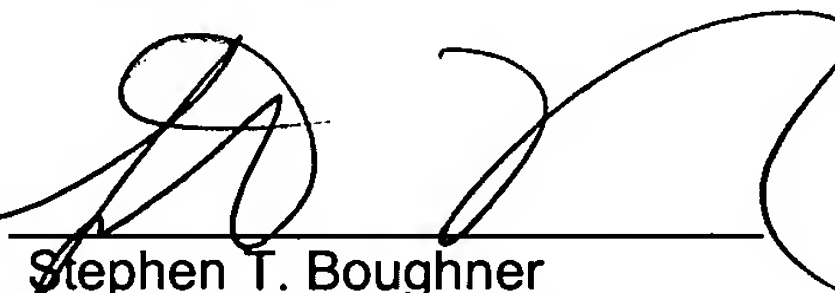
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: February 16, 2005

By: 
Stephen T. Boughner
Registration No. 45,317

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501